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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,519	09/29/2003	Takafumi Kurosawa	SHD-002-USA-PCT	9109
27955	7590	05/13/2010		
TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER MERCIER, MELISSA S	
			ART UNIT	PAPER NUMBER
			1615	
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			05/13/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/671,519	Applicant(s) KUROSAWA ET AL.	
	Examiner MELISSA S. MERCIER	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18, 20, 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

Receipt of Applicants Remarks and Amended Claims filed on February 15, 2010 is acknowledged. Claims 18, 20, and 22-24 remain pending in this application.

Maintained Rejections/Objections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lentini et al. (WO 00/33803) and Katsuhiko (JP01165517) in view of Tanaka (US Patent 5,540,921).

Lentini teaches of the preparation of sunscreen compositions that feel better on the skin and are less irritating than typical sunscreens because the enhanced photo protection is not achieved by using greater quantities of the sunscreen agent, (see page 1, and lines 5-10). "More preferably, the organic sunscreen is octyl methoxycinnamate" and other "sunscreens such as zinc oxide and titanium dioxide" (as specifically recited by Lentini et al. on page 5, lines 22- 23 and lines 10-11, respectively). The organic sunscreen is present in the amount of 1-10% (page 5, lines 24-26). The total amount of sunscreen is present in the amount of 1-20% and can be a combination of organic and

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inorganic sunscreens (claims). Therefore, since octyl methoxycinnimate is disclosed as being present up to 10% of the formulation, the zinc oxide could also be present in the amount up to 10% as well.

Lentini does not disclose the use of a glycoside selected from the group consisting of polyoxyethylene methyl glucoside, polyoxypropylene methyl glucoside and a mixture thereof.

Lentini additionally does not disclose the oxide being treated in a hydrophobic manner.

Katsuhiro teaches cosmetic agents that are also used to sustain the effects or prevent the damaging effects of ultraviolet rays of the skin with titanium dioxide particles having a particle size of 100-200nm along with polyoxyethylene methylglucoside in the amount of 3-10%, (see translated Patent Abstract of JP 01165517). In addition, it is well within the knowledge of the skilled artisan to utilize homologues of a compound, such as polyoxyethylene methylglycoside, which would obviously embrace the homologue of polyoxypropylene methylglucoside.

Tanaka discloses a solid O/W-type cosmetic composition comprising a powder component, including titanium dioxide and zinc oxide (column 3, lines 26-35). Powders provided with water repellency by a hydrophobic treatment can also be used. The O/W-type cosmetic composition can be used as solid cosmetic products such as sun screening creams (column 5, lines 25-28).

Regarding the newly submitted claims, Applicants attention is directed to MPEP 2113 which pertains to Product by Process claims. "[E]ven though product-by-process

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claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose[T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). Since both of these prior art references are directed to the very same use, namely topical sunscreen preparations for the skin, one having ordinary skill in the art would have been motivated to combine sunscreen components that are already known in the prior art to be used to treat the very same condition, namely sunburn.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have used to hydrophobic treatment of the oxides disclosed by Tanaka with in the composition of Lentini in order to provide water repellency.

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues:

***Applicants have presented conclusive and unrefuted evidence that the main cause of irritation of sunscreen compositions comprising octyl methoxycinnamate and zinc oxide powder may be the presence of the zinc oxide powder, and not necessarily the presence of octyl methoxycinnamate.**

It is unclear to the Examiner how evidence can be possible, such as it may be the presence of the zinc oxide powder is also conclusive and unrefuted. It is noted that Applicant has not provided any experimental evidence showing the irritation response to only the zinc oxide in order to make the conclusionary statement. It is also noted that all of the examples presented contain 20% zinc oxide, whereas the claims allow for as little as 1% to as much as 40%. It is suggested that Applicant provide some experimental evidence showing the irritation response of only zinc oxide and examples which contain zinc oxide in the amounts fully encompassed by the claims.

***The prior art fails to recognize the combination of zinc oxide and octylmethoxycinnamate causes irritation to the skin.**

While the Examiner acknowledges that Lentini does not recognize the combination causes irritation, he does recognize that high amounts of sun screen components cause irritation. As discussed above, Applicant's examples have a total of 37.5% of sunscreen agents which is almost twice the amount disclosed by Lentini. Lentini accomplishes the instant method by using less amounts of the claimed compounds. It is further noted that Applicant has attempted to employ "consisting essentially of" language, however, it appears by Applicants specification and arguments that the glucoside is an essential component to make the composition function as

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claimed and it is not included as essential by the claim language. Therefore, for purposes of examination, consisting essentially of has been interpreted as comprising. Applicant's attention is directed to MPEP 2111.03 which discussed the use of transitional phrases. In particular. The transitional phrase "consisting essentially of" limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA S. MERCIER whose telephone number is

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(571)272-9039. The examiner can normally be reached on 8:00am-4:30pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Wax can be reached on (571) 272-0623. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melissa S Mercier/
Examiner, Art Unit 1615

/Carlos A. Azpuru/
Primary Examiner, Art Unit 1615